

## Abstract

An object of the invention is to provide a high-pressure discharge lamp lighting device capable of executing dimming up to a lower luminous flux level than the dimming lower limit  
5 obtained by performing constant-current control in related arts.

A high-pressure discharge lamp lighting device of the invention includes power conversion unit for supplying AC power to a high-pressure discharge lamp as a load with a DC power  
10 supply as an input power supply for performing all lighting or dimming lighting. In an area where the voltage across the high-pressure discharge lamp grows as dimming deepens, the output characteristic of the power conversion unit is a characteristic for increasing the output current of the power  
15 conversion unit in response to an increase in the output voltage of the power conversion unit. The ratio of the increase in the output current to the increase in the output voltage is made roughly constant or the ratio of the increase in the output current to the increase in the output voltage is made larger  
20 as dimming becomes deeper.